REMARKS

This Amendment is responsive to the Office Action mailed on February 18, 2005. Claims 1, 5, 7, 8, 10, and 12-23 are amended. Claims 1-25 remain pending.

Claims 4 and 7-13 have been withdrawn. Upon the allowance of a generic claim, Applicants will be entitled to consideration of claims to additional species which are written in dependent form or otherwise contain all the limitations of a generic claim. Applicants respectfully submit that claims 1, 14 and 21 are generic claims.

The Examiner has indicated that Applicants are not entitled to rely on their German priority document to overcome the rejections raised in the Office Action, since a verified translation of Applicants' German priority document has not been made of record. Applicants submit herewith a verified English language translation of Applicants' German priority application no. 101 37 011.3.

Claims 1, 2, and 18 are objected to based on informalities in the claim language.

Claims 14-20 and 24 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 1, 2, and 5 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dry (US 6,989,334) in view of Kobayashi (5,013,323).

Claims 3, 6, 14, 15, 21-23 and 25 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dry in view of Kobayashi and in further view of Lyons (2004/0146235).

Claims 3 and 14-20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Dry in view of Kobayashi and in further view Nurmikko (2004/0015211).

Applicants respectfully traverse these rejections in view of the amended claims and the following comments.

Discussion of Objection to Claims 1, 2, and 18

Claims 1, 2, and 18 are objected to based on informalities in the claim language. In particular, the Examiner indicates that "the glass fibers" in claim 1 lacks positive antecedent

basis. Claim 1 is amended to overcome this objection.

The Examiner objects to claim 2 as the Examiner on the ground that it is unclear how the glass fibers (having a Bragg grating) are distributed over the entire extent of the implant. Figure 2 shows fibers distributed substantially over the extent (or entirety) of the implant. Further, Applicants submit that claim 2 does not specify a Bragg grating, and in that regard may be considered to be a generic claim. In the embodiments having a Bragg grating (see e.g., claim 6), the Bragg grating is provided in at least one region of a single fiber, as shown in Figure 5 and described on page 13 of Applicants' specification. Therefore, there may be regions of the fibers (or complete fibers) which do not have a Bragg grating or there may be fibers that have multiple Bragg gratings. Applicants' specification at page 12, first paragraph indicates that in one example embodiment, some fibers may serve only for reinforcing the implant, and such fibers may not be connected to the measuring device.

The Examiner objects to the term "transformer" in claim 18 as lacking antecedent basis. Claim 18 is amended to overcome this objection.

Withdrawal of the objections to claims 1, 2, and 18 is respectfully requested.

Discussion of Rejection of Claims 14-20 and 24 Under 35 U.S.C. § 112, First Paragraph.

Claims 14-20 and 24 are rejected under 35 U.S.C. § 112 , first paragraph, as failing to comply with the enabling requirement. In particular, the Examiner indicates with regard to claims 14-20 that "the specification does not adequately teach how to directly connect the at least one glass fiber (in the form of a fabric or fleece) to the measuring device or transducer (especially where the measuring device is external to the body)" (Office Action, page 3). Applicant points out that only claims 14 and 15 refer to a direct connection. The last paragraph of page 5 of Applicants' specification indicates that, in the case where the measuring device is outside the body, the glass fiber is led out from the implant and through the body tissue, so that a connection to the measuring device can be established. Further, Figure 3 shows a direct connection in the form of line 10, which runs from the implant 1 to the measuring device 11. Accordingly,

Applicants respectfully submit that the subject matter of claims 14 and 15 is disclosed in and enabled by the specification.

With regard to claims 16-20, the specification describes in detail the use of transmission elements 8 and 9 which may be used to connect the implant and the measuring device over a transmission link without a direct (wired) connection. The transmission elements may comprise transponders as indicated on page 11, last paragraph. Further, page 12, second paragraph of Applicants' specification indicates that if the transmission elements are both inside the body, they may communicate using an electromagnetic radiation with a wavelength of between 650 and 1000 nanometers. In addition, page 6 of the specification discusses an embodiment where the transducer is a light source having an associated light receiver. It is indicated on page 6 that light from the light source within the body can penetrate body tissue and be received by the light receiver external to the body. Accordingly, the subject matter of claims 16-20 is disclosed in and enabled by the specification.

With regard to claim 24, the Examiner indicates that the specification does not adequately disclose what wavelengths and intensities are chosen to induce mechanical change and/or material changes in the implant. Applicants' specification at page 7 discloses that the wavelength and intensity of the radiation may be chosen such that the radiation induces mechanical and/or material changes in the composite implant. As an example, it is possible to perform additional hardening of a polymeric composite material in specific regions, or weakening the implant by destroying the composite material (page 7, second paragraph). Further, on page 6, last full paragraph, it is indicated that the radiation can act on the implant by heating it up in specific regions. Page 17 of Applicants' specification, last paragraph, discloses using the radiation to harden the implant material by increased polymerization or to cause dissolution of the polymerization bonds. Further, it is indicated on page 17 that many effects of radiation on the implant are conceivable, dependent on the nature of the synthetic material used and the nature of the radiation fed in. Accordingly, one skilled in the art would appreciate from Applicants' disclosure that different wavelengths and intensities of radiation will have different effects on different materials. For example, a high intensity radiation will result in a heating up of most

materials. Depending on the material, such high intensity radiation may cause additional hardening of the material, thereby strengthening the material. Conversely, some materials may be weakened by being heated to a high temperature. Those skilled in the art would appreciate what particular wavelengths and intensities could be used to achieve different desired effects on different materials. Accordingly, the subject matter of claim 24 is disclosed in and enabled by the specification.

Withdrawal of the rejections under 35 U.S.C. § 112, first paragraph, is respectfully requested.

Discussion of Amended Claims

Claim 1 is amended to include the subject matter of claim 16 and to overcome the Examiner's objection regarding informality in the claim language.

Claim 16 is amended to depend from claim 21. Claims 17-19 are amended to depend from claim 1 rather than claim 16.

Claim 18 is amended to overcome the Examiner's objection regarding informality in the claim language.

Claims 14 and 21 are amended into independent form.

Certain of the claims are also amended herein to clarify the claimed subject matter.

Discussion of 35 U.S.C. § 103(a) Rejections

Claim 1 is amended herein to include the subject matter of claim 16. Claim 14 is amended into independent form. The Examiner has rejected the subject matter of claims 14 and 16 as being obvious over Dry in view of Kobayashi in further view of Nurmikko.

The Examiner has acknowledged that Dry and Kobayashi do not disclose the subject matter of claims 14 and 16. The Examiner relies on Nurmikko as disclosing the subject matter of claims 14 and 16.

Applicants have submitted herewith a verified English language translation of Applicant's German priority application. Applicants' priority date is July 28, 2001. Nurmikko

claims priority from a provisional application filed on June 4, 2002. Therefore, Applicants' priority document predates Nurmikko. Accordingly, Applicants respectfully submit that Nurmikko is not a proper prior art citation. Withdrawal of Nurmikko as a reference is respectfully requested, together with withdrawal of all claim rejections based thereon.

Claims 14 and 21, which are both amended into independent form herein, have been rejected as being obvious over Dry in view of Kobayashi in further view of Lyons.

The Examiner has acknowledged that Dry and Kobayashi do not disclose the subject matter of claims 14 and 21. Lyons claims a PCT filing date of March 27, 2002. As discussed above, Applicants' priority date is July 28, 2001. Therefore, Applicants' priority document predates Lyons. Accordingly, Applicants respectfully submit that Lyons is not a proper prior art citation. Withdrawal of Lyons as a reference is respectfully requested, together with withdrawal of all claim rejections based thereon.

Applicants respectfully submit that the present invention would not have been obvious to one skilled in the art in view of Dry, taken alone or in combination with any of the other prior art of record.

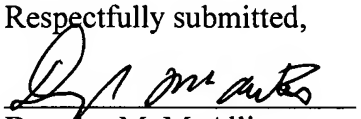
Withdrawal of the rejections under 35 U.S.C. § 103(a) is therefore respectfully requested.

Further remarks regarding the asserted relationship between Applicants' claims and the prior art are not deemed necessary, in view of the foregoing discussion. Applicants' silence as to any of the Examiner's comments is not indicative of an acquiescence to the stated grounds of rejection.

Conclusion

The Examiner is respectfully requested to reconsider this application, allow each of the pending claims and to pass this application on to an early issue. If there are any remaining issues that need to be addressed in order to place this application into condition for allowance, the Examiner is requested to telephone Applicants' undersigned attorney.

Respectfully submitted,



Douglas M. McAllister
Attorney for Applicant(s)
Registration No.: 37,886
Lipsitz & McAllister, LLC
755 Main Street
Monroe, CT 06468
(203) 459-0200

ATTORNEY DOCKET NO.: HOE-795
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